

The **RP5300 Series** is a high performance rotary sensor with a triangular aluminium case and stainless steel operating shaft for applications where system reliability is a design consideration. Incorporating innovative 'thick track' technology and precious metal multi-fingered electrical contacts, the sensor provides infinite output resolution and a long operational life.

For total reliability and quality assurance, the shaft is guided by two precision stainless steel ball-race bearings, to provide superior vibration and shock performance.

Extensively used in data acquisition and measurement control systems, they are environmentally sealed against the ingress of dust and water to IP66. If additional sensor protection is required, then an optional heat shrink boot is available.

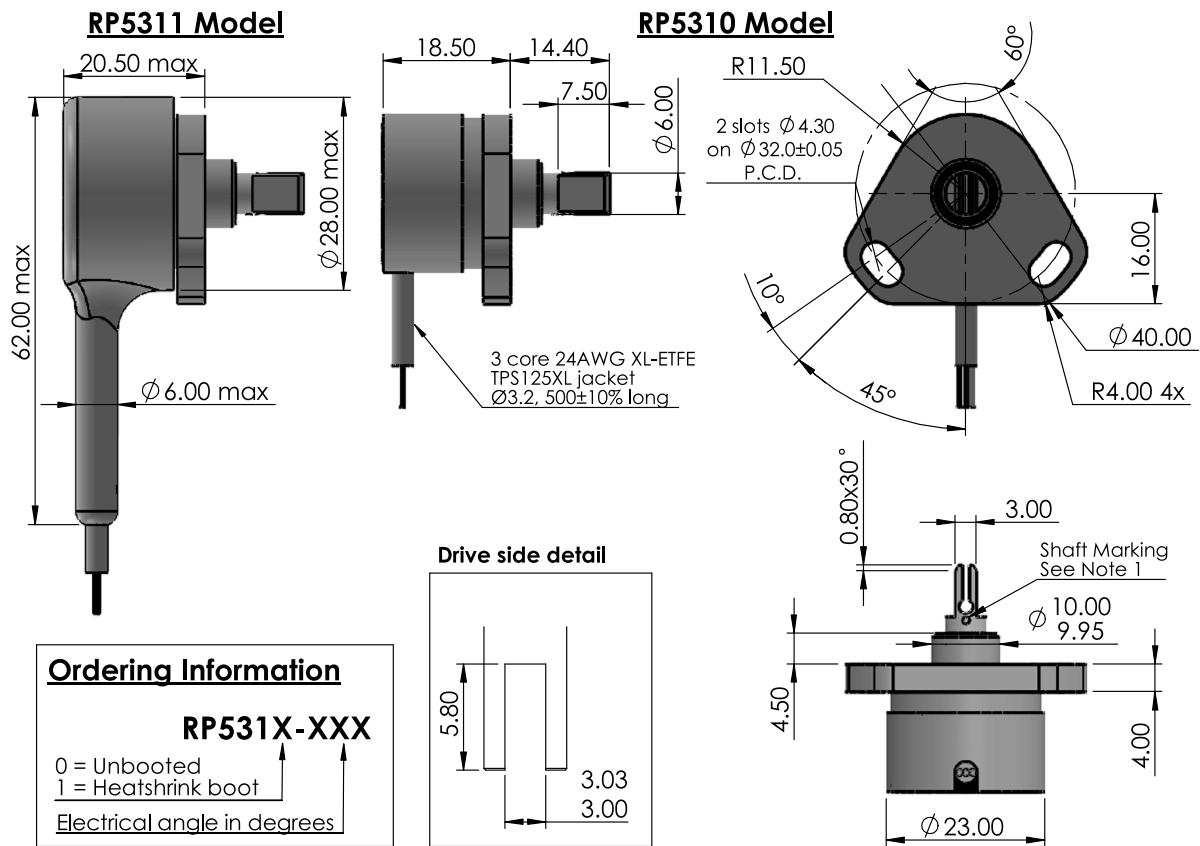
For full system integrity, this rotary potentiometer series is fitted with fire and chemical resistant, high temperature TPS125XL sleeved 24AWG signal cabling.

Key features and benefits

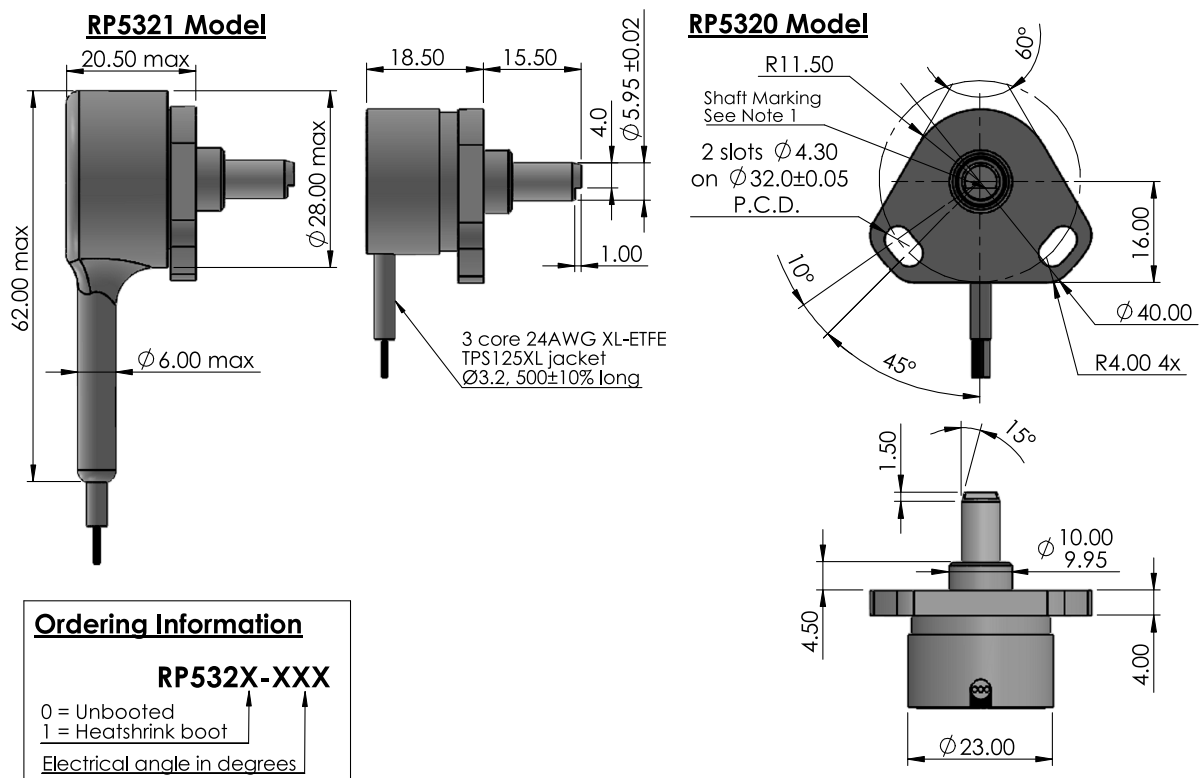
- Triangular aluminium case
- Shaft set between two precision ball-race bearings
- Choice of electrical angles, 100°, 130° and 350°
- Three stainless steel shafts, sprung, round and blade
- Maximum operating temperature 125°C (257°F)
- Sealed to IP66
- Optional heat shrink boot
- 3 core 24AWG XL-ETFE TPS125XL cabling
- Custom designs available on request



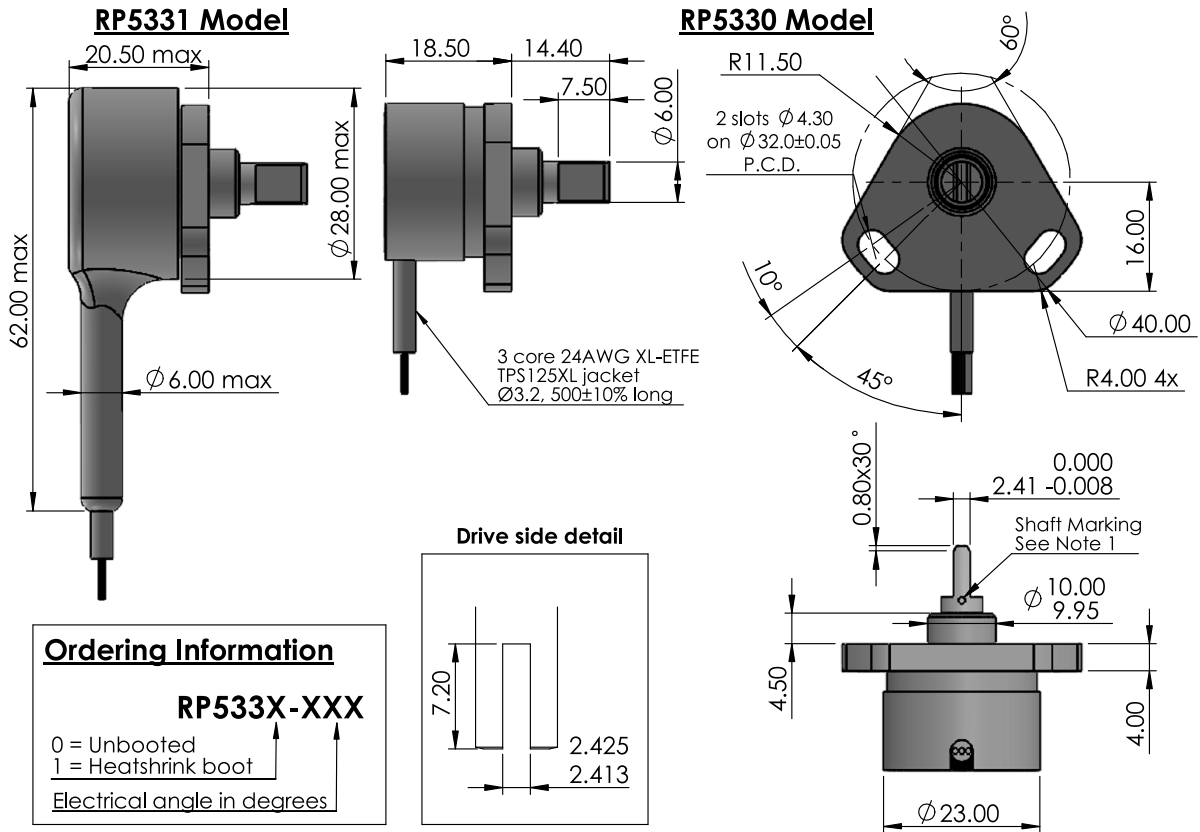
RP5310 and RP5311 – Triangular flange mounting with a sprung shaft



RP5320 and RP5321 – Triangular flange mounting with a round shaft



RP5330 and RP5331 – Triangular flange mounting with a blade shaft



Electrical and mechanical specification for RP5300 Series

Electrical angle	(±2°)	350°	130°	100°	
Resistance	(Typical)	4.5	1.5	1.0	Kohms
Non-linearity		<±0.5			%
Applied Voltage		<42	<14	<14	VDC
Maximum wiper current		1			mA
Mechanical travel		360° Continuous			
Output smoothness		MIL-R-39023 Grd.C 0.1%			
Insulation resistance (at 500V DC)		>100			Mohms
Operating temperature range		-55 to +125			°C
Sealing		IP66			
Shaft starting torque (max.)		60			grams
Weight. (approx.)		38			grams
Materials		Case - Aluminium alloy Shaft - Stainless steel 303 Bearing - Martensitic stainless steel			

Notes:

1. When shaft marking is facing cable exit, instrument is mid-travel.
2. Incorrect wiring may cause internal damage.
3. General dimension tolerance is ±0.25

Electrical connections See note 2

